

REMARKS/ARGUMENTS

Claims 38-52 and 54-64 are pending in the present application. Claims 38-51 are withdrawn and claims 52 and 54-64 stand rejected. Claim 53 had been canceled without prejudice or disclaimer of the subject matter therein or equivalents thereof. Claims 52 and 59 have been amended. No new matter has been entered. This amendment is in response to the Office Action dated August 17, 2010.

I. STATUS OF THE CLAIMS

Claims 52, 55, 57, 59, 61, 63 and 64 are rejected under 35 U.S.C. § 103(a), (hereinafter, “Section 103(a)”), as being unpatentable over newly cited Bedell et al. (U.S. Pat. No. 5,686,907, hereinafter “Bedell”) in view of Baston et al. (U.S. Pat. No. 4,260,121, hereinafter “Baston”).

Claims 54, 56, 58, 60 and 62 are rejected under Section 103(a) as being unpatentable over Bedell and Baston as applied to claims 52, 55 and 59 above, and further in view of Lindstrom et al. (U.S. Pat. 6,299,108 B1, hereinafter “Lindstrom”).

Applicant respectfully traverses all rejections and requests reconsideration of the pending claims for at least the following reasons.

A. REJECTION UNDER SECTION 103(a), BEDELL IN VIEW OF BASTON

Claims 52, 55, 57, 59, 61, 63 and 64 are rejected under Section 103(a) as being unpatentable over Bedell in view of Baston. Applicant respectfully traverses this rejection. In the interests of moving along examination, independent claim 52, upon which claims 55, 57,

59, 61, 63 and 64 all depend from, has been amended to claim an embodiment of the present invention, reciting in part:

“An apparatus for load limiting in an aircraft high-lift system,...the position sensors have an angle position transmitter on the drive unit, and angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains, ...the monitoring unit is provided to carry out a signal comparison between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit.”

As required for a showing of obviousness, all claim elements must be shown by the combination of Bedell and Baston.

Applicant respectfully traverses the rejections of the Action which cites to Bedell, col. 7, lines 47-51; col. 7, line 29 to col. 8, line 4; and Figure 4 as teaching the elements of the claims. It is noted that claim 52 refers to “load limiting in an aircraft high-lift system”. However, contrary to the Action, after careful review, Bedell fails to teach an apparatus for *load limiting in a high lift system*. Bedell actually refers to the control of a misalignment between two adjacent ends of the auxiliary airfoil or its lost motion/function. Bedell refers to the mechanical power transmission to drive stations of individual segments of the landing-flap and/or leading-edge slat systems via respective drive trains, position sensors and a drive unit, however, does not teach of an apparatus for “load limiting in the high lift system” itself. See Bedell, col. 7 lines 10-45 which discloses that the position sensor 34 at the end of the drive unit provides a reference signal and only the signal of the proximity sensor 44, applied for interacting with proximity targets 40, is compared with the reference signal from the position sensor 34. Thus, a deviation of a normal state of a drive system, e.g. by a skew or loss of a

dedicated landing flap or slat, can be detected. The system of Bedell is not suited for detecting a jamming within the entire drive system.

Bedell fails to disclose, teach or suggest that the “position sensors have an angle position transmitter on the drive unit, and angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains.” The position sensors 34 of Bedell do not teach the “asymmetry transmitters, at the ends of the drive trains” as claimed. When a blockage occurs between e.g. the slat as shown in Fig. 4 of Bedell, it would not be possible to detect a jamming in the torque tube 36. In Bedell, when the position sensor 34 references the angle position of the torque tube 36, this reference signal forms the basis for the validation of the signal provided by the proximity sensors 44. This further provides no motivation for a combination with the teachings of Baston in order to arrive at the claimed “position sensors have an angle position transmitter on the drive unit” because Bedell’s use of signals provided by the position sensor 34 at the end of the torque tube 36 is intended to be used as a reference signal for the proximity sensor 44.

Moreover, Baston fails to provide for the deficiencies of Bedell. Claim 52 recites the limitation of “angle position transmitters, which operate as asymmetry transmitters, *at the ends of the drive trains...*” (emphasis added). In the Action, Baston is cited as having “motors 23, 24” provided with a “disc 30”, “probes 31, 32” as teaching “an angle position transmitter on the drive unit”. However, nowhere is there shown in Baston of angle position transmitters “at the ends of the drive trains”. The “probes” in Baston do not teach or suggest the recited “angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains”. Accordingly, claim 52 is believed patentable over Baston in combination with Bedell.

As claims 55, 57, 59, 61, 63 and 64 include all the limitations of their base claim 52, these dependent claims are believed allowable over Bedell and Baston for at least the same reasons as amended claim 52. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 52, 55, 57, 59, 61, 63 and 64 under Section 103(a).

B. REJECTION UNDER SECTION 103(a), BEDELL, BASTON AND LINDSTROM

Claims 54, 56, 58, 60 and 62 are rejected under Section 103(a) as being unpatentable over Bedell and Baston and further in view of Lindstrom. As discussed above, independent claim 52, upon which dependent claims 54, 56, 58, 60 and 62 depend from, recites in part “the position sensors have an angle position transmitter on the drive unit, and angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains”; “measuring signals from at least two position sensors and calculating at least one reference variable from the measured signals”, and that “by comparison of the at least one reference variable which represents a load in the drive trains with a corresponding threshold value which is predetermined from a maximum permissible load, whereas the monitoring unit is provided to carry out a signal comparison between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit, produces a control signal for monitored limiting of a power supply to the drive unit in the sense of limiting a drive power that is supplied.”

As required for a showing of obviousness, all claim elements must be disclosed by the combination of Bedell, Baston and Lindstrom. However, as discussed above, Bedell in view of Baston, fail to disclose, teach or suggest the underlying limitations of amended independent

claim 52. Further, Lindstrom clearly fails to disclose the required “angle position transmitter on the drive unit” and further, neither does it disclose, teach nor suggest the “angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains”.

Lindstrom at most only describes “rotary sensors 30” on the branching “transmission 12”. (Figs. 6-8, col. 3, lines 3-17). However, nowhere is there disclosed the underlying claimed angle position transmitters, one at each end of the drive trains. Therefore, Lindstrom fails to provide for the deficiencies of Bedell and Baston. As such, claim 52 is believed patentable.

For at least the foregoing reasons, amended claim 52 is believed patentable over Bedell and Baston in view of Lindstrom, either alone or in combination, for not teaching the limitations of the claims. The claimed apparatus as recited in amended claim 52 has a fundamentally different structural arrangement from Bedell, Baston and Lindstrom. Moreover, these references further fail to teach of the claimed “monitoring unit is provided to carry out a signal comparison between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit”. As claimed, Applicant’s apparatus achieves the desired objective of the invention in measuring of an angle-deviation between the port and the starboard wings. Accordingly, it is believed that amended claim 52 is patentable over Bedell and Baston and further in view of Lindstrom.

Claims 54, 56, 58, 60 and 62 as dependent on claim 52, are believed allowable for the same reasons, since Bedell in light of Baston and Lindstrom fail to teach or suggest ALL claim limitations as required to establish a prima facie case of obviousness. Applicant therefore respectfully requests withdrawal of the rejection of claims 54, 56, 58, 60 and 62 under Section 103(a).

II. CONCLUSION

In view of the foregoing, Applicant respectfully submits that all of the pending claims of the present application are now in condition for allowance. Reconsideration and allowance of the present application are therefore earnestly requested. Should the Examiner have any questions regarding the above amendments, the Examiner is invited to telephone Applicant's representative at the number listed below.

Respectfully submitted,

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